

SEQUENCE LISTING

<110> Gallatin, Michael W.  
Van der Vieren, Monica

<120> Novel Human B2

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Gln Phe Gly Gly Ser Arg Leu Val Val Gly Ala Pro Leu Glu Ala Val	
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Ala Val Asn Gln Thr Gly Arg Leu Tyr Asp Cys Ala Pro Ala Thr Gly	
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Met Cys Gln Pro Ile Val Leu Arg Ser Pro Leu Glu Ala Val Asn Met	
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Ser Leu Gly Leu Ser Leu Val Thr Ala Thr Asn Asn Ala Gln Leu Leu	
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Lys Gly Ser Cys Leu Leu Leu Gly Ser Ser Leu Gln Phe Ile Gln Ala	
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Val Pro Ala Ser Met Pro Glu Cys Pro Arg Gln Glu Met Asp Ile Ala	
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Ala Cys Ala Lys Asn Met Tyr Ala Lys Gly Ser Cys Leu Leu Leu Gly	
115 120 125 130	
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Ser Ser Leu Gln Phe Ile Gln Ala Ile Pro Ala Thr Met Pro Glu Cys	
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Pro Gly Gln Glu Met Asp Ile Ala Phe Leu Ile Asp Gly Ser Gly Ser	
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Ile Asp Gln Ser Asp Phe Thr Gln Met Lys Asp Phe Val Lys Ala Leu	
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Met Gly Gln Leu Ala Ser Thr Ser Thr Ser Phe Ser Leu Met Gln Tyr	
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 tca aac atc ctg aag act cat ttt acc ttc acg gaa ttc aag agc agc	681
Ser Asn Ile Leu Lys Thr His Phe Thr Phe Thr Glu Phe Lys Ser Ser	
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Leu Ser Pro Gln Ser Leu Val Asp Ala Ile Val Gln Leu Gln Gly Leu	
215 220 225	
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Thr Tyr Thr Ala Ser Gly Ile Gln Lys Val Val Lys Glu Leu Phe His	
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agc aag aat ggg gcc cga aaa agt gcc aag aag ata cta att gtc atc	825
Ser Lys Asn Gly Ala Arg Lys Ser Ala Lys Lys Ile Leu Ile Val Ile	
245 250 255	
aca gat ggg cag aaa ttc aga gac ccc ctg gag tat aga cat gtc atc	873
Thr Asp Gly Gln Lys Phe Arg Asp Pro Leu Glu Tyr Arg His Val Ile	
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Pro Glu Ala Glu Lys Ala Gly Ile Ile Arg Tyr Ala Ile Gly Val Gly	
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Asp Ala Phe Arg Glu Pro Thr Ala Leu Gln Glu Leu Asn Thr Ile Gly	
295 300 305	
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Ser Ala Pro Ser Gln Asp His Val Phe Lys Val Gly Asn Phe Val Ala	
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Leu Arg Ser Ile Gln Arg Gln Ile Gln Glu Lys Ile Phe Ala Ile Glu	
325 330 335	
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Gly Thr Glu Ser Arg Ser Ser Ser Phe Gln His Glu Met Ser Gln	
340 345 350	
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Glu Gly Phe Ser Ser Ala Leu Ser Met Asp Gly Pro Val Leu Gly Ala	
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Val Gly Gly Phe Ser Trp Ser Gly Gly Ala Phe Leu Tyr Pro Ser Asn	
375 380 385	
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Met Arg Ser Thr Phe Ile Asn Met Ser Gln Glu Asn Glu Asp Met Arg	
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gac gct tac ctg ggt tac tcc acc gca ctg gcc ttt tgg aag ggg gtc	1305
Asp Ala Tyr Leu Gly Tyr Ser Thr Ala Leu Ala Phe Trp Lys Gly Val	
405 410 415	
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His Ser Leu Ile Leu Gly Ala Pro Arg His Gln His Thr Gly Lys Val	
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Val Ile Phe Thr Gln Glu Ser Arg His Trp Arg Pro Lys Ser Glu Val	
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cat His	tac Tyr	tat Tyr 485	gag Glu	cac His	acc Thr	cga Arg	ggg Gly 490	ggg Gly	cag Gln	gtg Val	tcg Ser	gtg Val 495	tgc Cys	ccc Pro	atg Met	1545
cct Pro	ggt Gly 500	gtg Val	agg Arg	agc Ser	agg Arg	tgg Trp 505	cat His	tgt Cys	ggg Gly	acc Thr	acc Thr 510	ctc Leu	cat His	ggg Gly	gag Glu	1593
cag Gln 515	ggc Gly	cat His	cct Pro	tgg Trp	ggc Gly 520	cgc Arg	ttt Phe	ggg Gly	gcg Ala	gct Ala 525	ctg Leu	aca Thr	gtg Val	cta Leu	ggg Gly 530	1641
gac Asp	gtg Val	aat Asn	ggg Gly	gac Asp 535	agt Ser	ctg Leu	gcg Ala	gat Asp	gtg Val 540	gct Ala	att Ile	ggt Gly	gca Ala	ccc Pro 545	gga Gly	1689
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ctt Leu 595	aca Thr	cag Gln	gat Asp	ggc Gly	ctg Leu 600	gtg Val	gac Asp	ctg Leu	gcc Ala	gtg Val 605	gga Gly	gcc Ala	cag Gln	ggg Gly	cac His 610	1881
gtg Val	ctg Leu	ctg Leu	ctt Leu	agg Arg 615	agt Ser	ctg Leu	cct Pro	ttg Leu	ctg Leu 620	aaa Lys	gtg Val	ggg Gly	atc Ile	tcc Ser 625	att Ile	1929
aga Arg	ttt Phe	gcc Ala	ccc Pro 630	tca Ser	gag Glu	gtg Val	gca Ala	aag Lys 635	act Thr	gtg Val	tac Tyr	cag Gln	tgc Cys	tgg Trp 640	gga Gly	1977
agg Arg	act Thr	ccc Pro 645	act Thr	gtc Val	ctc Leu	gaa Glu	gct Ala 650	gga Gly	gag Glu	gcc Ala	acc Thr	gtc Val 655	tgt Cys	ctc Leu	act Thr	2025
gtc Val	cgc Arg	aaa Lys	ggt Gly	tca Ser	cct Pro	gac Asp 665	ctg Leu	tta Leu	ggt Gly	gat Asp	gtc Val 670	caa Gln	agc Ser	tct Ser	gtc Val	2073
agg Arg	tat Tyr	gat Asp	ctg Leu	gcg Ala	ttg Leu 680	gat Asp	ccg Pro	ggc Gly	cgt Arg	ctg Leu 685	att Ile	tct Ser	cgt Arg	gcc Ala	att Ile 690	2121

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Phe Asp Glu Thr Lys Asn Cys Thr Leu Thr Arg Arg Lys Thr Leu Gly	
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Leu Gly Asp His Cys Glu Thr Met Lys Leu Leu Leu Pro Asp Cys Val	
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Glu Asp Ala Val Thr Pro Ile Ile Leu Arg Leu Asn Leu Ser Leu Ala	
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Gly Asp Ser Ala Pro Ser Arg Asn Leu Arg Pro Val Leu Ala Val Gly	
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Ser Gln Asp His Val Thr Ala Ser Phe Pro Phe Glu Lys Asn Cys Glu	
755 760 765 770	
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Gly Asn Leu Gly Val Ser Phe Asn Phe Ser Gly Leu Gln Val Leu Glu	
775 780 785	
gta gga agc tcc cca gag ctc act gtg aca gta aca gtt tgg aat gag	2457
Val Gly Ser Ser Pro Glu Leu Thr Val Thr Val Thr Val Trp Asn Glu	
790 795 800	
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Gly Glu Asp Ser Tyr Gly Thr Leu Ile Lys Phe Tyr Tyr Pro Ala Glu	
805 810 815	
cta tct tac cga cgg gtg aca aga gcc cag caa cct cat ccg tac cca	2553
Leu Ser Tyr Arg Arg Val Thr Arg Ala Gln Gln Pro His Pro Tyr Pro	
820 825 830	
cta cgc ctg gca tgt gag gct gag ccc acg ggc cag gag agc ctg agg	2601
Leu Arg Leu Ala Cys Glu Ala Glu Pro Thr Gly Gln Glu Ser Leu Arg	
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Ser Ser Ser Cys Ser Ile Asn His Pro Ile Phe Arg Glu Gly Ala Lys	
855 860 865	
gcc acc ttc atg atc aca ttt gat gtc tcc tac aag gcc ttc ctg gga	2697
Ala Thr Phe Met Ile Thr Phe Asp Val Ser Tyr Lys Ala Phe Leu Gly	
870 875 880	
gac agg ttg ctt ctg agg gcc agc gca agc agt gag aat aat aag cct	2745
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Glu Thr Ser Lys Thr Ala Phe Gln Leu Glu Leu Pro Val Lys Tyr Thr	
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Val Tyr Thr Val Ile Ser Arg Gln Glu Asp Ser Thr Lys His Phe Asn	
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cgt	gtg	aat	aac	ctg	agt	cca	ttg	acg	ctg	gcc	atc	agc	gtt	aac	ttc	2937	
Arg	Val	Asn	Asn	Leu	Ser	Pro	Leu	Thr	Leu	Ala	Ile	Ser	Val	Asn	Phe		
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tgg	gtc	ccc	atc	ctt	ctg	aat	ggt	gtg	gcc	gtg	tgg	gat	gtg	act	ctg	2985	
Trp	Val	Pro	Ile	Leu	Leu	Asn	Gly	Val	Ala	Val	Trp	Asp	Val	Thr	Leu		
		965					970					975					
agg	agc	cca	gca	cag	ggt	gtc	tcc	tgt	gtg	tca	cag	agg	gaa	cct	cct	3033	
Arg	Ser	Pro	Ala	Gln	Gly	Val	Ser	Cys	Val	Ser	Gln	Arg	Glu	Pro	Pro		
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caa	cat	tcc	gac	ctt	ctg	acc	cag	atc	caa	gga	cgc	tct	gtg	ctg	gac	3081	
Gln	His	Ser	Asp	Leu	Leu	Thr	Gln	Ile	Gln	Gly	Arg	Ser	Val	Leu	Asp		
995				1000					1005					1010			
tgc	gcc	atc	gcc	gac	tgc	ctg	cac	ctc	cgc	tgt	gac	atc	ccc	tcc	ttg	3129	
Cys	Ala	Ile	Ala	Asp	Cys	Leu	His	Leu	Arg	Cys	Asp	Ile	Pro	Ser	Leu		
			1015					1020					1025				
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gct	gaa	atc	aca	ttc	aac	aca	tct	gtg	tat	tcc	cag	ctg	ccg	gga	cag	3273	
Ala	Glu	Ile	Thr	Phe	Asn	Thr	Ser	Val	Tyr	Ser	Gln	Leu	Pro	Gly	Gln		
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Glu	Ala	Phe	Leu	Arg	Ala	Gln	Val	Ser	Thr	Met	Leu	Glu	Glu	Tyr	Val		
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gtc	tat	gag	ccc	gtc	ttc	ctc	atg	gtg	ttc	agc	tca	gtg	gga	ggt	ctg	3369	
Val	Tyr	Glu	Pro	Val	Phe	Leu	Met	Val	Phe	Ser	Ser	Val	Gly	Gly	Leu		
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ctg	tta	ctg	gct	ctc	atc	act	gtg	gcg	ctg	tac	aag	ctt	ggc	ttc	ttc	3417	
Leu	Leu	Leu	Ala	Leu	Ile	Thr	Val	Ala	Leu	Tyr	Lys	Leu	Gly	Phe	Phe		
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aaa	cgt	cag	tat	aaa	gag	atg	ctg	gat	cta	cca	tct	gca	gat	cct	gac	3465	
Lys	Arg	Gln	Tyr	Lys	Glu	Met	Leu	Asp	Leu	Pro	Ser	Ala	Asp	Pro	Asp		
		1125				1130					1135						
cca	gcc	ggc	cag	gca	gat	tcc	aac	cat	gag	act	cct	cca	cat	ctc	acg	3513	
Pro	Ala	Gly	Gln	Ala	Asp	Ser	Asn	His	Glu	Thr	Pro	Pro	His	Leu	Thr		
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<212> PRT

<213> Mus musculus

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Asp	Ala	Ala	Ser	Phe	Gly	Gln	Thr	Val	Val	Gln	Phe	Gly	Gly	Ser	Arg	35	40	45	
Leu	Val	Val	Gly	Ala	Pro	Leu	Glu	Ala	Val	Ala	Val	Asn	Gln	Thr	Gly	50	55	60	
Gln	Ser	Ser	Asp	Cys	Pro	Pro	Ala	Thr	Gly	Val	Cys	Gln	Pro	Ile	Leu	65	70	75	80
Leu	His	Ile	Pro	Leu	Glu	Ala	Val	Asn	Met	Ser	Leu	Gly	Leu	Ser	Leu	85	90	95	
Val	Ala	Asp	Thr	Asn	Asn	Ser	Gln	Leu	Leu	Ala	Cys	Gly	Pro	Thr	Ala	100	105	110	
Gln	Arg	Ala	Cys	Ala	Lys	Asn	Met	Tyr	Ala	Lys	Gly	Ser	Cys	Leu	Leu	115	120	125	
Leu	Gly	Ser	Ser	Leu	Gln	Phe	Ile	Gln	Ala	Ile	Pro	Ala	Thr	Met	Pro	130	135	140	
Glu	Cys	Pro	Gly	Gln	Glu	Met	Asp	Ile	Ala	Phe	Leu	Ile	Asp	Gly	Ser	145	150	155	160
Gly	Ser	Ile	Asp	Gln	Ser	Asp	Phe	Thr	Gln	Met	Lys	Asp	Phe	Val	Lys	165	170	175	
Ala	Leu	Met	Gly	Gln	Leu	Ala	Ser	Thr	Ser	Thr	Ser	Phe	Ser	Leu	Met	180	185	190	
Gln	Tyr	Ser	Asn	Ile	Leu	Lys	Thr	His	Phe	Thr	Phe	Thr	Glu	Phe	Lys	195	200	205	
Ser	Ser	Leu	Ser	Pro	Gln	Ser	Leu	Val	Asp	Ala	Ile	Val	Gln	Leu	Gln	210	215	220	
Gly	Leu	Thr	Tyr	Thr	Ala	Ser	Gly	Ile	Gln	Lys	Val	Val	Lys	Glu	Leu	225	230	235	240
Phe	His	Ser	Lys	Asn	Gly	Ala	Arg	Lys	Ser	Ala	Lys	Lys	Ile	Leu	Ile	245	250	255	
Val	Ile	Thr	Asp	Gly	Gln	Lys	Phe	Arg	Asp	Pro	Leu	Glu	Tyr	Arg	His	260	265	270	
Val	Ile	Pro	Glu	Ala	Glu	Lys	Ala	Gly	Ile	Ile	Arg	Tyr	Ala	Ile	Gly	275	280	285	
Val	Gly	Asp	Ala	Phe	Arg	Glu	Pro	Thr	Ala	Leu	Gln	Glu	Leu	Asn	Thr	290	295	300	

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Ile 305	Gly	Ser	Ala	Pro	Ser 310	Gln	Asp	His	Val	Phe 315	Lys	Val	Gly	Asn	Phe 320
Val	Ala	Leu	Arg	Ser 325	Ile	Gln	Arg	Gln	Ile 330	Gln	Glu	Lys	Ile	Phe 335	Ala
Ile	Glu	Gly	Thr 340	Glu	Ser	Arg	Ser	Ser 345	Ser	Ser	Phe	Gln	His 350	Glu	Met
Ser	Gln	Glu 355	Gly	Phe	Ser	Ser	Ala 360	Leu	Ser	Met	Asp	Gly 365	Pro	Val	Leu
Gly 370	Ala	Val	Gly	Gly	Phe	Ser 375	Trp	Ser	Gly	Gly 380	Ala	Phe	Leu	Tyr	Pro
Ser 385	Asn	Met	Arg	Ser	Thr 390	Phe	Ile	Asn	Met	Ser 395	Gln	Glu	Asn	Glu	Asp 400
Met	Arg	Asp	Ala	Tyr 405	Leu	Gly	Tyr	Ser	Thr 410	Ala	Leu	Ala	Phe	Trp 415	Lys
Gly	Val	His	Ser 420	Leu	Ile	Leu	Gly	Ala 425	Pro	Arg	His	Gln	His 430	Thr	Gly
Lys	Val	Val 435	Ile	Phe	Thr	Gln	Glu 440	Ser	Arg	His	Trp	Arg 445	Pro	Lys	Ser
Glu 450	Val	Arg	Gly	Thr	Gln	Ile 455	Gly	Ser	Tyr	Phe	Gly 460	Ala	Ser	Leu	Cys
Ser 465	Val	Asp	Met	Asp	Arg 470	Asp	Gly	Ser	Thr	Asp 475	Leu	Val	Leu	Ile	Gly 480
Val	Pro	His	Tyr	Tyr 485	Glu	His	Thr	Arg	Gly 490	Gly	Gln	Val	Ser	Val 495	Cys
Pro	Met	Pro	Gly 500	Val	Arg	Ser	Arg	Trp 505	His	Cys	Gly	Thr	Thr 510	Leu	His
Gly	Glu	Gln 515	Gly	His	Pro	Trp	Gly 520	Arg	Phe	Gly	Ala	Ala 525	Leu	Thr	Val
Leu	Gly 530	Asp	Val	Asn	Gly	Asp 535	Ser	Leu	Ala	Asp	Val 540	Ala	Ile	Gly	Ala
Pro 545	Gly	Glu	Glu	Glu	Asn 550	Arg	Gly	Ala	Val	Tyr 555	Ile	Phe	His	Gly	Ala 560
Ser	Arg	Gln	Asp	Ile 565	Ala	Pro	Ser	Pro	Ser 570	Gln	Arg	Val	Thr	Gly 575	Ser
Gln	Leu	Phe	Leu 580	Arg	Leu	Gln	Tyr	Phe 585	Gly	Gln	Ser	Leu	Ser 590	Gly	Gly
Gln	Asp	Leu 595	Thr	Gln	Asp	Gly	Leu 600	Val	Asp	Leu	Ala	Val 605	Gly	Ala	Gln
Gly	His 610	Val	Leu	Leu	Leu	Arg 615	Ser	Leu	Pro	Leu	Leu 620	Lys	Val	Gly	Ile



Ser Ile Arg Phe Ala Pro Ser Glu Val Ala Lys Thr Val Tyr Gln Cys  
625 630 635 640

Trp Gly Arg Thr Pro Thr Val Leu Glu Ala Gly Glu Ala Thr Val Cys  
645 650 655

Leu Thr Val Arg Lys Gly Ser Pro Asp Leu Leu Gly Asp Val Gln Ser  
660 665 670

Ser Val Arg Tyr Asp Leu Ala Leu Asp Pro Gly Arg Leu Ile Ser Arg  
675 680 685

Ala Ile Phe Asp Glu Thr Lys Asn Cys Thr Leu Thr Arg Arg Lys Thr  
690 695 700

Leu Gly Leu Gly Asp His Cys Glu Thr Met Lys Leu Leu Leu Pro Asp  
705 710 715 720

Cys Val Glu Asp Ala Val Thr Pro Ile Ile Leu Arg Leu Asn Leu Ser  
725 730 735

Leu Ala Gly Asp Ser Ala Pro Ser Arg Asn Leu Arg Pro Val Leu Ala  
740 745 750

Val Gly Ser Gln Asp His Val Thr Ala Ser Phe Pro Phe Glu Lys Asn  
755 760 765

Cys Glu Gly Asn Leu Gly Val Ser Phe Asn Phe Ser Gly Leu Gln Val  
770 775 780

Leu Glu Val Gly Ser Ser Pro Glu Leu Thr Val Thr Val Thr Val Trp  
785 790 795 800

Asn Glu Gly Glu Asp Ser Tyr Gly Thr Leu Ile Lys Phe Tyr Tyr Pro  
805 810 815

Ala Glu Leu Ser Tyr Arg Arg Val Thr Arg Ala Gln Gln Pro His Pro  
820 825 830

Tyr Pro Leu Arg Leu Ala Cys Glu Ala Glu Pro Thr Gly Gln Glu Ser  
835 840 845

Leu Arg Ser Ser Ser Cys Ser Ile Asn His Pro Ile Phe Arg Glu Gly  
850 855 860

Ala Lys Ala Thr Phe Met Ile Thr Phe Asp Val Ser Tyr Lys Ala Phe  
865 870 875 880

Leu Gly Asp Arg Leu Leu Leu Arg Ala Ser Ala Ser Ser Glu Asn Asn  
885 890 895

Lys Pro Glu Thr Ser Lys Thr Ala Phe Gln Leu Glu Leu Pro Val Lys  
900 905 910

Tyr Thr Val Tyr Thr Val Ile Ser Arg Gln Glu Asp Ser Thr Lys His  
915 920 925

Phe Asn Phe Ser Ser Ser His Gly Glu Arg Gln Lys Glu Ala Glu His  
930 935 940

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Arg Tyr Arg Val Asn Asn Leu Ser Pro Leu Thr Leu Ala Ile Ser Val  
945 950 955 960

Asn Phe Trp Val Pro Ile Leu Leu Asn Gly Val Ala Val Trp Asp Val  
965 970 975

Thr Leu Arg Ser Pro Ala Gln Gly Val Ser Cys Val Ser Gln Arg Glu  
980 985 990

Pro Pro Gln His Ser Asp Leu Leu Thr Gln Ile Gln Gly Arg Ser Val  
995 1000 1005

Leu Asp Cys Ala Ile Ala Asp Cys Leu His Leu Arg Cys Asp Ile Pro  
1010 1015 1020

Ser Leu Gly Thr Leu Asp Glu Leu Asp Phe Ile Leu Lys Gly Asn Leu  
1025 1030 1035 1040

Ser Phe Gly Trp Ile Ser Gln Thr Leu Gln Lys Lys Val Leu Leu Leu  
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Ser Glu Ala Glu Ile Thr Phe Asn Thr Ser Val Tyr Ser Gln Leu Pro  
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Gly Gln Glu Ala Phe Leu Arg Ala Gln Val Ser Thr Met Leu Glu Glu  
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Tyr Val Val Tyr Glu Pro Val Phe Leu Met Val Phe Ser Ser Val Gly  
1090 1095 1100

Gly Leu Leu Leu Leu Ala Leu Ile Thr Val Ala Leu Tyr Lys Leu Gly  
1105 1110 1115 1120

Phe Phe Lys Arg Gln Tyr Lys Glu Met Leu Asp Leu Pro Ser Ala Asp  
1125 1130 1135

Pro Asp Pro Ala Gly Gln Ala Asp Ser Asn His Glu Thr Pro Pro His  
1140 1145 1150

Leu Thr Ser  
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49

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 20 25 30

gat Asp	gca Ala	gcc Ala 35	agc Ser	ttc Phe	gga Gly	cag Gln	act Thr 40	gtg Val	gtg Val	cag Gln	ttt Phe	ggt Gly 45	gga Gly	tct Ser	cga Arg	144
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Ile Gln Gly Arg Ser Val Leu Asp Cys Ala Ile Ala Asp Cys Leu His  
1010 1015 1020

Leu Arg Cys Asp Ile Pro Ser Leu Gly Thr Leu Asp Glu Leu Asp Phe  
1025 1030 1035 1040

Ile Leu Lys Gly Asn Leu Ser Phe Gly Trp Ile Ser Gln Thr Leu Gln  
1045 1050 1055

Lys Lys Val Leu Leu Leu Ser Glu Ala Glu Ile Thr Phe Asn Thr Ser  
1060 1065 1070

Val Tyr Ser Gln Leu Pro Gly Gln Glu Ala Phe Leu Arg Ala Gln Val  
1075 1080 1085

Ser Thr Met Leu Glu Glu Tyr Val Val Tyr Glu Pro Val Phe Leu Met  
1090 1095 1100

Val Phe Ser Ser Val Gly Gly Leu Leu Leu Leu Ala Leu Ile Thr Val  
1105 1110 1115 1120

Ala Leu Tyr Lys Leu Gly Phe Phe Lys Arg Gln Tyr Lys Glu Met Leu  
1125 1130 1135

Asp Leu Pro Ser Ala Asp Pro Asp Pro Ala Gly Gln Ala Asp Ser Asn  
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His Glu Thr Pro Pro His Leu Thr Ser  
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<213> Rattus rattus

<220>

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<223> Description of Artificial Sequence: primer

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gtg atc ctc ctg tgt ggc tgg gtc ctg gct tcc tgt cat ggg tct aac 102  
Val Ile Leu Leu Cys Gly Trp Val Leu Ala Ser Cys His Gly Ser Asn  
10 15 20

T09290" E46T6260

ctg Leu	gat Asp	gtg Val	gag Glu 25	gaa Glu	ccc Pro	atc Ile	gtg Val	ttc Phe 30	aga Arg	gag Glu	gat Asp	gca Ala	gcc Ala 35	agc Ser	ttt Phe	150
gga Gly	cag Gln	act Thr 40	gtg Val	gtg Val	cag Gln	ttt Phe	ggt Gly 45	gga Gly	tct Ser	cga Arg	ctc Leu	gtg Val 50	gtg Val	gga Gly	gcc Ala	198
cct Pro	ctg Leu 55	gag Glu	gcg Ala	gtg Val	gca Ala	gtc Val 60	aac Asn	caa Gln	aca Thr	gga Gly	cgg Arg 65	ttg Leu	tat Tyr	gac Asp	tgt Cys	246
gca Ala 70	cct Pro	gcc Ala	act Thr	ggc Gly	atg Met 75	tgc Cys	cag Gln	ccc Pro	atc Ile	gta Val 80	ctg Leu	cgc Arg	agt Ser	ccc Pro	cta Leu 85	294
gag Glu	gca Ala	gtg Val	aac Asn 90	atg Met	tcc Ser	ctg Leu	ggc Gly	ctg Leu	tct Ser 95	ctg Leu	gtg Val	act Thr	gcc Ala	acc Thr 100	aat Asn	342
aac Asn	gcc Ala	cag Gln 105	ttg Leu	ctg Leu	gct Ala	tgt Cys	ggt Gly	cca Pro 110	act Thr	gca Ala	cag Gln	aga Arg	gct Ala 115	tgt Cys	gtg Val	390
aag Lys	aac Asn	atg Met 120	tat Tyr	gcg Ala	aaa Lys	ggt Gly	tcc Ser 125	tgc Cys	ctc Leu	ctt Leu	ctc Leu	ggc Gly 130	tcc Ser	agc Ser	ttg Leu	438
cag Gln 135	ttc Phe	atc Ile	cag Gln	gca Ala	gtc Val	cct Pro 140	gcc Ala	tcc Ser	atg Met	cca Pro	gag Glu 145	tgt Cys	cca Pro	aga Arg	caa Gln	486
gag Glu 150	atg Met	gac Asp	att Ile	gct Ala	ttc Phe 155	ctg Leu	att Ile	gat Asp	ggt Gly	tct Ser 160	ggc Gly	agc Ser	att Ile	aac Asn	caa Gln 165	534
agg Arg	gac Asp	ttt Phe	gcc Ala	cag Gln 170	atg Met	aag Lys	gac Asp	ttt Phe	gtc Val 175	aaa Lys	gct Ala	ttg Leu	atg Met	gga Gly 180	gag Glu	582
ttt Phe	gcg Ala	agc Ser	acc Thr 185	agc Ser	acc Thr	ttg Leu	ttc Phe	tcc Ser 190	ctg Leu	atg Met	caa Gln	tac Tyr	tcg Ser 195	aac Asn	atc Ile	630
ctg Leu	aag Lys 200	acc Thr	cat His	ttt Phe	acc Thr	ttc Phe	act Thr 205	gaa Glu	ttc Phe	aag Lys	aac Asn	atc Ile 210	ctg Leu	gac Asp	cct Pro	678
cag Gln 215	agc Ser	ctg Leu	gtg Val	gat Asp	ccc Pro	att Ile 220	gtc Val	cag Gln	ctg Leu	caa Gln	ggc Gly 225	ctg Leu	acc Thr	tac Tyr	aca Thr	726
gcc Ala 230	aca Thr	ggc Gly	atc Ile	cgg Arg	aca Thr 235	gtg Val	atg Met	gaa Glu	gag Glu	cta Leu 240	ttt Phe	cat His	agc Ser	aag Lys	aat Asn 245	774
ggg Gly	tcc Ser	cgt Arg	aaa Lys	agt Ser 250	gcc Ala	aag Lys	aag Lys	atc Ile	ctc Leu 255	ctt Leu	gtc Val	atc Ile	aca Thr 260	gat Asp	ggg Gly	822

cag aaa tac aga gac ccc ctg gag tat agt gat gtc att ccc gcc gca	870
Gln Lys Tyr Arg Asp Pro Leu Glu Tyr Ser Asp Val Ile Pro Ala Ala	
265 270 275	
gac aaa gct ggc atc att cgt tat gct att ggg gtg gga gat gcc ttc	918
Asp Lys Ala Gly Ile Ile Arg Tyr Ala Ile Gly Val Gly Asp Ala Phe	
280 285 290	
cag gag ccc act gcc ctg aag gag ctg aac acc att ggc tca gct ccc	966
Gln Glu Pro Thr Ala Leu Lys Glu Leu Asn Thr Ile Gly Ser Ala Pro	
295 300 305	
cca cag gac cac gtg ttc aag gta ggc aac ttt gca gca ctt cgc agc	1014
Pro Gln Asp His Val Phe Lys Val Gly Asn Phe Ala Ala Leu Arg Ser	
310 315 320 325	
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Ile Gln Arg Gln Leu Gln Glu Lys Ile Phe Ala Ile Glu Gly Thr Gln	
330 335 340	
tca agg tca agt agt tcc ttt cag cac gag atg tca caa gaa ggt ttc	1110
Ser Arg Ser Ser Ser Phe Gln His Glu Met Ser Gln Glu Gly Phe	
345 350 355	
agt tca gct ctc aca tcg gat gga ccc gtt ctg ggg gcc gtg gga agc	1158
Ser Ser Ala Leu Thr Ser Asp Gly Pro Val Leu Gly Ala Val Gly Ser	
360 365 370	
ttc agc tgg tcc gga ggt gcc ttc tta tat ccc cca aat acg aga ccc	1206
Phe Ser Trp Ser Gly Gly Ala Phe Leu Tyr Pro Pro Asn Thr Arg Pro	
375 380 385	
acc ttt atc aac atg tct cag gag aat gtg gac atg aga gac tcc tac	1254
Thr Phe Ile Asn Met Ser Gln Glu Asn Val Asp Met Arg Asp Ser Tyr	
390 395 400 405	
ctg ggt tac tcc acc gca gtg gcc ttt tgg aag ggg gtt cac agc ctg	1302
Leu Gly Tyr Ser Thr Ala Val Ala Phe Trp Lys Gly Val His Ser Leu	
410 415 420	
atc ctg ggg gcc ccg cgt cac cag cac acg ggg aag gtt gtc atc ttt	1350
Ile Leu Gly Ala Pro Arg His Gln His Thr Gly Lys Val Val Ile Phe	
425 430 435	
acc cag gaa gcc agg cat tgg agg ccc aag tct gaa gtc aga ggg aca	1398
Thr Gln Glu Ala Arg His Trp Arg Pro Lys Ser Glu Val Arg Gly Thr	
440 445 450	
cag atc ggc tcc tac ttc ggg gcc tct ctc tgt tct gtg gac gtg gat	1446
Gln Ile Gly Ser Tyr Phe Gly Ala Ser Leu Cys Ser Val Asp Val Asp	
455 460 465	
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Arg Asp Gly Ser Xaa Asp Leu Val Leu Ile Gly Ala Pro His Tyr Tyr	
470 475 480 485	
gag cag acc cga ggg ggg cag gtc tca gtg ttc ccc gtg ccc ggt gtg	1542
Glu Gln Thr Arg Gly Gly Gln Val Ser Val Phe Pro Val Pro Gly Val	
490 495 500	

T03290 E46T6860

agg ggc agg tgg cag tgt gag gcc acc ctc cac ggg gag cag ggc cat	1590
Arg Gly Arg Trp Gln Cys Glu Ala Thr Leu His Gly Glu Gln Gly His	
505 510 515	
cct tgg ggc cgc ttt ggg gtg gct ctg aca gtg ctg ggg gac gta aac	1638
Pro Trp Gly Arg Phe Gly Val Ala Leu Thr Val Leu Gly Asp Val Asn	
520 525 530	
ggg gac aat ctg gca gac gtg gct att ggt gcc cct gga gag gag gag	1686
Gly Asp Asn Leu Ala Asp Val Ala Ile Gly Ala Pro Gly Glu Glu Glu	
535 540 545	
agc aga ggt gct gtc tac ata ttt cat gga gcc tcg aga ctg gag atc	1734
Ser Arg Gly Ala Val Tyr Ile Phe His Gly Ala Ser Arg Leu Glu Ile	
550 555 560 565	
atg ccc tca ccc agc cag cgg gtc act ggc tcc cag ctc tcc ctg aga	1782
Met Pro Ser Pro Ser Gln Arg Val Thr Gly Ser Gln Leu Ser Leu Arg	
570 575 580	
ctg cag tat ttt ggg cag tca ttg agt ggg ggt cag gac ctt aca cag	1830
Leu Gln Tyr Phe Gly Gln Ser Leu Ser Gly Gly Gln Asp Leu Thr Gln	
585 590 595	
gat ggc ctg gtg gac ctg gcc gtg gga gcc cag ggg cac gta ctg ctg	1878
Asp Gly Leu Val Asp Leu Ala Val Gly Ala Gln Gly His Val Leu Leu	
600 605 610	
ctc agg agt ctg cct ctg ctg aaa gtg gag ctc tcc ata aga ttc gcc	1926
Leu Arg Ser Leu Pro Leu Leu Lys Val Glu Leu Ser Ile Arg Phe Ala	
615 620 625	
ccc atg gag gtg gca aag gct gtg tac cag tgc tgg gaa agg act ccc	1974
Pro Met Glu Val Ala Lys Ala Val Tyr Gln Cys Trp Glu Arg Thr Pro	
630 635 640 645	
act gtc ctc gaa gct gga gag gcc act gtc tgt ctc act gtc cac aaa	2022
Thr Val Leu Glu Ala Gly Glu Ala Thr Val Cys Leu Thr Val His Lys	
650 655 660	
ggc tca cct gac ctg tta ggt aat gtc caa ggc tct gtc agg tat gat	2070
Gly Ser Pro Asp Leu Leu Gly Asn Val Gln Gly Ser Val Arg Tyr Asp	
665 670 675	
ctg gcg tta gat ccg ggc cgc ctg att tct cgt gcc att ttt gat gag	2118
Leu Ala Leu Asp Pro Gly Arg Leu Ile Ser Arg Ala Ile Phe Asp Glu	
680 685 690	
act aag aac tgc act ttg acg gga agg aag act ctg ggg ctt ggt gat	2166
Thr Lys Asn Cys Thr Leu Thr Gly Arg Lys Thr Leu Gly Leu Gly Asp	
695 700 705	
cac tgc gaa aca gtg aag ctg ctt ttg ccg gac tgt gtg gaa gat gca	2214
His Cys Glu Thr Val Lys Leu Leu Leu Pro Asp Cys Val Glu Asp Ala	
710 715 720 725	
gtg agc cct atc atc ctg cgc ctc aac ttt tcc ctg gtg aga gac tct	2262
Val Ser Pro Ile Ile Leu Arg Leu Asn Phe Ser Leu Val Arg Asp Ser	
730 735 740	

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<211> 1161
<212> PRT
<213> Rattus rattus
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Asp	Ala	Ala	Ser	Phe	Gly	Gln	Thr	Val	Val	Gln	Phe	Gly	Gly	Ser	Arg	35	40	45	
Leu	Val	Val	Gly	Ala	Pro	Leu	Glu	Ala	Val	Ala	Val	Asn	Gln	Thr	Gly	50	55	60	
Arg	Leu	Tyr	Asp	Cys	Ala	Pro	Ala	Thr	Gly	Met	Cys	Gln	Pro	Ile	Val	65	70	75	80
Leu	Arg	Ser	Pro	Leu	Glu	Ala	Val	Asn	Met	Ser	Leu	Gly	Leu	Ser	Leu	85	90	95	
Val	Thr	Ala	Thr	Asn	Asn	Ala	Gln	Leu	Leu	Ala	Cys	Gly	Pro	Thr	Ala	100	105	110	
Gln	Arg	Ala	Cys	Val	Lys	Asn	Met	Tyr	Ala	Lys	Gly	Ser	Cys	Leu	Leu	115	120	125	
Leu	Gly	Ser	Ser	Leu	Gln	Phe	Ile	Gln	Ala	Val	Pro	Ala	Ser	Met	Pro	130	135	140	
Glu	Cys	Pro	Arg	Gln	Glu	Met	Asp	Ile	Ala	Phe	Leu	Ile	Asp	Gly	Ser	145	150	155	160
Gly	Ser	Ile	Asn	Gln	Arg	Asp	Phe	Ala	Gln	Met	Lys	Asp	Phe	Val	Lys	165	170	175	
Ala	Leu	Met	Gly	Glu	Phe	Ala	Ser	Thr	Ser	Thr	Leu	Phe	Ser	Leu	Met	180	185	190	
Gln	Tyr	Ser	Asn	Ile	Leu	Lys	Thr	His	Phe	Thr	Phe	Thr	Glu	Phe	Lys	195	200	205	
Asn	Ile	Leu	Asp	Pro	Gln	Ser	Leu	Val	Asp	Pro	Ile	Val	Gln	Leu	Gln	210	215	220	
Gly	Leu	Thr	Tyr	Thr	Ala	Thr	Gly	Ile	Arg	Thr	Val	Met	Glu	Glu	Leu	225	230	235	240
Phe	His	Ser	Lys	Asn	Gly	Ser	Arg	Lys	Ser	Ala	Lys	Lys	Ile	Leu	Leu	245	250	255	
Val	Ile	Thr	Asp	Gly	Gln	Lys	Tyr	Arg	Asp	Pro	Leu	Glu	Tyr	Ser	Asp	260	265	270	
Val	Ile	Pro	Ala	Ala	Asp	Lys	Ala	Gly	Ile	Ile	Arg	Tyr	Ala	Ile	Gly	275	280	285	
Val	Gly	Asp	Ala	Phe	Gln	Glu	Pro	Thr	Ala	Leu	Lys	Glu	Leu	Asn	Thr	290	295	300	
Ile	Gly	Ser	Ala	Pro	Pro	Gln	Asp	His	Val	Phe	Lys	Val	Gly	Asn	Phe	305	310	315	320
Ala	Ala	Leu	Arg	Ser	Ile	Gln	Arg	Gln	Leu	Gln	Glu	Lys	Ile	Phe	Ala	325	330	335	

00004-06601

Ile	Glu	Gly	Thr	Gln	Ser	Arg	Ser	Ser	Ser	Phe	Gln	His	Glu	Met	
			340									350			
Ser	Gln	Glu	Gly	Phe	Ser	Ser	Ala	Leu	Thr	Ser	Asp	Gly	Pro	Val	Leu
		355					360					365			
Gly	Ala	Val	Gly	Ser	Phe	Ser	Trp	Ser	Gly	Gly	Ala	Phe	Leu	Tyr	Pro
	370					375					380				
Pro	Asn	Thr	Arg	Pro	Thr	Phe	Ile	Asn	Met	Ser	Gln	Glu	Asn	Val	Asp
385					390					395					400
Met	Arg	Asp	Ser	Tyr	Leu	Gly	Tyr	Ser	Thr	Ala	Val	Ala	Phe	Trp	Lys
				405					410					415	
Gly	Val	His	Ser	Leu	Ile	Leu	Gly	Ala	Pro	Arg	His	Gln	His	Thr	Gly
			420					425					430		
Lys	Val	Val	Ile	Phe	Thr	Gln	Glu	Ala	Arg	His	Trp	Arg	Pro	Lys	Ser
		435					440					445			
Glu	Val	Arg	Gly	Thr	Gln	Ile	Gly	Ser	Tyr	Phe	Gly	Ala	Ser	Leu	Cys
		450				455					460				
Ser	Val	Asp	Val	Asp	Arg	Asp	Gly	Ser	Xaa	Asp	Leu	Val	Leu	Ile	Gly
465					470					475					480
Ala	Pro	His	Tyr	Tyr	Glu	Gln	Thr	Arg	Gly	Gly	Gln	Val	Ser	Val	Phe
				485					490					495	
Pro	Val	Pro	Gly	Val	Arg	Gly	Arg	Trp	Gln	Cys	Glu	Ala	Thr	Leu	His
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Gly	Glu	Gln	Gly	His	Pro	Trp	Gly	Arg	Phe	Gly	Val	Ala	Leu	Thr	Val
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Leu	Gly	Asp	Val	Asn	Gly	Asp	Asn	Leu	Ala	Asp	Val	Ala	Ile	Gly	Ala
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Pro	Gly	Glu	Glu	Glu	Ser	Arg	Gly	Ala	Val	Tyr	Ile	Phe	His	Gly	Ala
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Ser	Arg	Leu	Glu	Ile	Met	Pro	Ser	Pro	Ser	Gln	Arg	Val	Thr	Gly	Ser
				565					570					575	
Gln	Leu	Ser	Leu	Arg	Leu	Gln	Tyr	Phe	Gly	Gln	Ser	Leu	Ser	Gly	Gly
			580					585					590		
Gln	Asp	Leu	Thr	Gln	Asp	Gly	Leu	Val	Asp	Leu	Ala	Val	Gly	Ala	Gln
		595					600					605			
Gly	His	Val	Leu	Leu	Leu	Arg	Ser	Leu	Pro	Leu	Leu	Lys	Val	Glu	Leu
	610					615					620				
Ser	Ile	Arg	Phe	Ala	Pro	Met	Glu	Val	Ala	Lys	Ala	Val	Tyr	Gln	Cys
625					630					635					640
Trp	Glu	Arg	Thr	Pro	Thr	Val	Leu	Glu	Ala	Gly	Glu	Ala	Thr	Val	Cys
				645					650					655	

Leu	Thr	Val	His	Lys	Gly	Ser	Pro	Asp	Leu	Leu	Gly	Asn	Val	Gln	Gly
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Ser	Val	Arg	Tyr	Asp	Leu	Ala	Leu	Asp	Pro	Gly	Arg	Leu	Ile	Ser	Arg
		675					680					685			
Ala	Ile	Phe	Asp	Glu	Thr	Lys	Asn	Cys	Thr	Leu	Thr	Gly	Arg	Lys	Thr
	690					695					700				
Leu	Gly	Leu	Gly	Asp	His	Cys	Glu	Thr	Val	Lys	Leu	Leu	Leu	Pro	Asp
705					710					715					720
Cys	Val	Glu	Asp	Ala	Val	Ser	Pro	Ile	Ile	Leu	Arg	Leu	Asn	Phe	Ser
				725					730					735	
Leu	Val	Arg	Asp	Ser	Ala	Ser	Pro	Arg	Asn	Leu	His	Pro	Val	Leu	Ala
			740					745					750		
Val	Gly	Ser	Gln	Asp	His	Ile	Thr	Ala	Ser	Leu	Pro	Phe	Glu	Lys	Asn
		755					760					765			
Cys	Lys	Gln	Glu	Leu	Leu	Cys	Glu	Gly	Asp	Leu	Gly	Ile	Ser	Phe	Asn
	770					775					780				
Phe	Ser	Gly	Leu	Gln	Val	Leu	Val	Val	Gly	Gly	Ser	Pro	Glu	Leu	Thr
785					790					795					800
Val	Thr	Val	Thr	Val	Trp	Asn	Glu	Gly	Glu	Asp	Ser	Tyr	Gly	Thr	Leu
				805					810					815	
Val	Lys	Phe	Tyr	Tyr	Pro	Ala	Gly	Leu	Ser	Tyr	Arg	Arg	Val	Thr	Gly
			820					825					830		
Thr	Gln	Gln	Pro	His	Gln	Tyr	Pro	Leu	Arg	Leu	Ala	Cys	Glu	Ala	Glu
		835					840					845			
Pro	Ala	Ala	Gln	Glu	Asp	Leu	Arg	Ser	Ser	Ser	Cys	Ser	Ile	Asn	His
	850					855					860				
Pro	Ile	Phe	Arg	Glu	Gly	Ala	Lys	Thr	Thr	Phe	Met	Ile	Thr	Phe	Asp
865					870					875					880
Val	Ser	Tyr	Lys	Ala	Phe	Leu	Gly	Asp	Arg	Leu	Leu	Leu	Arg	Ala	Lys
				885					890					895	
Ala	Ser	Ser	Glu	Asn	Asn	Lys	Pro	Asp	Thr	Asn	Lys	Thr	Ala	Phe	Gln
			900					905					910		
Leu	Glu	Leu	Pro	Val	Lys	Tyr	Thr	Val	Tyr	Thr	Leu	Ile	Ser	Arg	Gln
		915					920					925			
Glu	Asp	Ser	Thr	Asn	His	Val	Asn	Phe	Ser	Ser	Ser	His	Gly	Gly	Arg
	930					935					940				
Arg	Gln	Glu	Ala	Ala	His	Arg	Tyr	Arg	Val	Asn	Asn	Leu	Ser	Pro	Leu
945					950					955					960
Lys	Leu	Ala	Val	Arg	Val	Asn	Phe	Trp	Val	Pro	Val	Leu	Leu	Asn	Gly
				965					970					975	

Val Ala Val Trp Asp Val Thr Leu Ser Ser Pro Ala Gln Gly Val Ser  
 980 985 990

Cys Val Ser Gln Met Lys Pro Pro Gln Asn Pro Asp Phe Leu Thr Gln  
 995 1000 1005

Ile Gln Arg Arg Ser Val Leu Asp Cys Ser Ile Ala Asp Cys Leu His  
 1010 1015 1020

Phe Arg Cys Asp Ile Pro Ser Leu Asp Ile Gln Asp Glu Leu Asp Phe  
 025 1030 1035 1040

Ile Leu Arg Gly Asn Leu Ser Phe Gly Trp Val Ser Gln Thr Leu Gln  
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Glu Lys Val Leu Leu Val Ser Glu Ala Glu Ile Thr Phe Asp Thr Ser  
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Val Tyr Ser Gln Leu Pro Gly Gln Glu Ala Phe Leu Arg Ala Gln Val  
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Glu Thr Thr Leu Glu Glu Tyr Val Val Tyr Glu Pro Ile Phe Leu Val  
 1090 1095 1100

Ala Gly Ser Ser Val Gly Gly Leu Leu Leu Leu Ala Leu Ile Thr Val  
 105 1110 1115 1120

Val Leu Tyr Lys Leu Gly Phe Xaa Lys Arg Gln Tyr Lys Glu Met Leu  
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 1140 1145 1150

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009290" 04676860

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<210> 68
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098343-062601



22

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<221> CDS

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Cys Gly Glu Asp Val Tyr Ala Gln Gly Phe Cys Val Leu Leu Asp Ala	
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Tyr Asp Cys Ala Ala Ala Thr Gly Met Cys Gln Pro Ile Pro Leu His  
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Ser Asn Leu Leu Lys Ile His Phe Thr Phe Thr Gln Phe Arg Thr Ser  
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ctg Leu 705	ggg Gly	att Ile	cac His	tgt Cys 710	gaa Glu	acc Thr	ctg Leu	aag Lys	ctg Leu 715	ctt Leu	ttg Leu	cca Pro	gat Asp	tgt Cys	gtg Val 720	2160

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Arg Glu Pro Ile Pro Ser Pro Gln Asn Leu Arg Pro Val Leu Ala Val	
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Ser	Tyr	Gly	Thr	Ala	Ile	Thr	Leu	Tyr	Tyr	Pro	Ala	Gly	Leu	Ser	Tyr		
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agg	cgg	gtg	tcg	ggc	cag	aca	caa	ccc	tgg	cag	cgc	ccc	ctg	cac	ctc	528	
Arg	Arg	Val	Ser	Gly	Gln	Thr	Gln	Pro	Trp	Gln	Arg	Pro	Leu	His	Leu		
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gca tgt gag gct gta cct acc gag agc gag ggc ttg agg agt acc agc	576
Ala Cys Glu Ala Val Pro Thr Glu Ser Glu Gly Leu Arg Ser Thr Ser	
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tgc agc gtc aac cac ccc atc ttc caa ggg ggt gct cag ggc act ttc	624
Cys Ser Val Asn His Pro Ile Phe Gln Gly Gly Ala Gln Gly Thr Phe	
195 200 205	
gta gtc aag ttc gat gtc tcc tcc aag gcc agc ctg ggt gac agg ttg	672
Val Val Lys Phe Asp Val Ser Ser Lys Ala Ser Leu Gly Asp Arg Leu	
210 215 220	
ctc atg ggg gcc agt gcc agc agt gag aat aat aag cct gcg agc aac	720
Leu Met Gly Ala Ser Ala Ser Ser Glu Asn Asn Lys Pro Ala Ser Asn	
225 230 235 240	
aag acc tcc ttt gag ctg gaa ctg cca gtg aaa tac gct gtc tac atg	768
Lys Thr Ser Phe Glu Leu Glu Leu Pro Val Lys Tyr Ala Val Tyr Met	
245 250 255	
atg atc aca agg cac gaa ggc tcc acc agg ttc ttc aac ttt tcc act	816
Met Ile Thr Arg His Glu Gly Ser Thr Arg Phe Phe Asn Phe Ser Thr	
260 265 270	
tcc gct gag aag agc agc aaa gag gcc gag cac cgc tat cgg gtg aac	864
Ser Ala Glu Lys Ser Ser Lys Glu Ala Glu His Arg Tyr Arg Val Asn	
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aac ctg agt ctg cga gat gtg gcc gtc agc gtg gac ttc tgg gcc ccc	912
Asn Leu Ser Leu Arg Asp Val Ala Val Ser Val Asp Phe Trp Ala Pro	
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gtg cag ctg aac gga gca gct gtg tgg gac gtg gcg gtg gag gcc cct	960
Val Gln Leu Asn Gly Ala Ala Val Trp Asp Val Ala Val Glu Ala Pro	
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gcc cag agc ctg ccc tgt gcg cgg gag agg gaa cct ccg agg acc tct	1008
Ala Gln Ser Leu Pro Cys Ala Arg Glu Arg Glu Pro Pro Arg Thr Ser	
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gac ctg agc cgg gtc ccg ggg agt ccc gtg ctg gac tgc agc gtt gcg	1056
Asp Leu Ser Arg Val Pro Gly Ser Pro Val Leu Asp Cys Ser Val Ala	
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cac tgc ctg agg ttc cgc tgc cac atc ccc tcc ttc agc gcc aag gag	1104
His Cys Leu Arg Phe Arg Cys His Ile Pro Ser Phe Ser Ala Lys Glu	
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gag ctc cac ttc acc ctg aag ggc aac ctc agc ttc gcc tgg gtc agc	1152
Glu Leu His Phe Thr Leu Lys Gly Asn Leu Ser Phe Ala Trp Val Ser	
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Gln Met Leu Gln Lys Lys Val Ser Val Val Ser Val Ala Glu Ile Thr	
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ttc aac agg gcc gtg tac tcc caa gtt ccg ggc gag gag ccc ttt atg	1248
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Arg	Pro	Val	Leu	Ala	Thr	Gly	Ser	Gln	Asp	His	Phe	Ile	Ala	Ser	Leu	
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Ala	Cys	Glu	Ala	Val	Pro	Thr	Glu	Ser	Glu	Gly	Leu	Arg	Ser	Thr	Ser		
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Lys	Thr	Ser	Phe	Glu	Leu	Glu	Leu	Pro	Val	Lys	Tyr	Ala	Val	Tyr	Met		
			245						250					255			
Met	Ile	Thr	Arg	His	Glu	Gly	Ser	Thr	Arg	Phe	Phe	Asn	Phe	Ser	Thr		
			260					265					270				
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Gln	Met	Leu	Gln	Lys	Lys	Val	Ser	Val	Val	Ser	Val	Ala	Glu	Ile	Thr		
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Phe	Asn	Arg	Ala	Val	Tyr	Ser	Gln	Val	Pro	Gly	Glu	Glu	Pro	Phe	Met		
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Arg	Ala	Gln	Val	Glu	Thr	Val	Leu	Glu	Glu	Tyr	Glu	Glu	His	Asp	Pro		
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Leu	Ile	Ser	Ala	Thr	Leu	Tyr	Lys	Leu	Gly	Phe	Phe	Lys	Arg	Arg	Tyr		
	450					455					460						
Lys	Glu	Met	Leu	Gly	Glu	Lys	Pro	Gly	Asp	Ala	Ala	Thr	Phe	Pro	Gly		
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